## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

05-261941

(43) Date of publication of application: 12.10.1993

(51)Int.CI.

B41J 2/21

B41J 2/05

1/034 HO4N HO4N 1/23

(21) Application number: **04-061799** 

(22) Date of filing:

(71)Applicant: RICOH CO LTD

18.03.1992

(72)Inventor: SEKIYA TAKURO

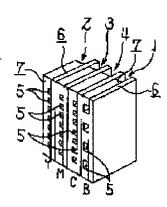
**UMEZAWA NOBUHIKO** 

## (54) INK JET RECORDING METHOD AND INK JET RECORDING HEAD

(57) Abstract:

PURPOSE: To print black characters to be thick and clear, and provide a document with modulation when a document, in which a color image and black characters are mixed, is printed by making the picture element diameter of a black ink larger than the picture element diameters of other color inks.

CONSTITUTION: For an ink jet recording head, the size of an orifice 5 of a black head 1 is formed to be larger than the size of the orifice 5 of color heads 2-4. In addition, the arrangement density of the orifice 5 of the color heads 2-4 is formed to be denser than the arrangement density of the orifice 5 of the black head 1. An ink drop 20 of the black ink discharged by the orifice 5 becomes larger, and the picture element diameter of the black ink becomes larger than the picture element diameters of the inks for color (yellow ink, magenta ink, cyan ink).



## LEGAL STATUS

[Date of request for examination]

23.04.1997

[Date of sending the examiner's decision of rejection]

07.09.1999

[Kind of final disposal of application other than the examiner's decision of rejection or application converted

registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of

11-15830

rejection

[Date of requesting appeal against examiner's decision of 04.10.1999

rejection]

[Date of extinction of right]